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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,852	02/23/2004	Takahiro Goto	Q79959	5491

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EXAMINER

GILLIAM, BARBARA LEE

ART UNIT PAPER NUMBER

1752

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/782,852

Applicant(s)

GOTO, TAKAHIRO

Examiner

Barbara L. Gilliam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2006, 28 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/28/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The REMARKS filed August 14, 2006 have been entered and fully considered.
2. Claim 1-21 are present.
3. Applicant's clarification of claim 17 is appreciated.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, 7-14, 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over AOSHIMA et al. (EP 1 235 107 A1) in view of ARIAS et al. (US 6,933,093 B1).

a. In EP 1 235 107 A1, AOSHIMA et al. teach a photopolymerization composition that is cured with visible light or an infrared laser and is used as a recording layer in a negative planographic printing plate precursor. The composition comprises a polymerizable compound having at least one radical-polymerizable ethylenically unsaturated double bond, a radical polymerization initiator, a binder polymer and a compound generating heat by infrared exposure (abstract). An onium salt, such as the sulfonium salt of formula (V), is preferred as the polymerization initiator ([0023]-[0033]). According to the teachings of AOSHIMA et al, it is preferable to select a linear organic

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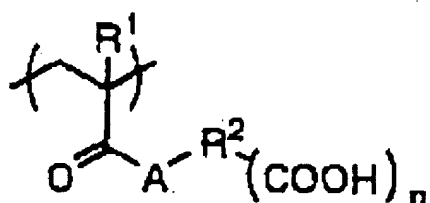
polymer as the binder, which can be dissolved or swollen with water or an alkaline solution to enable development with water or an alkaline solution ([0035]-[0036]).

Polymers containing a carboxyl group in the side chain are especially preferred. The weight average molecular of the binder polymer is 5,000 or more, preferably 10,000 to 300,000 ([0039]). The binder polymer is used in an amount of 20 to 95% by weight ([0041]). The compound generating heat by infrared exposure can be a dye or pigment such as the preferable cyanine dye and black pigments ([0043]-[0052]). The composition is coated on a support in an amount of 0.5 to 5.0 g/m² to make a planographic printing plate ([0064]-[0066]) which can be imaged using a laser which radiate infrared rays having a wavelength of 760 nm to 1200 nm ([0080]). An oxygen blocking protective layer can further be disposed on the photopolymerization composition layer ([0013]).

b. AOSHIMA et al. do not teach a compound having a weight average molecular weight of 3000 or less and having at least one carboxylic acid group however ARIAS et al. teach a radiation sensitive coating comprising a stabilizing acid, specifically benzoic acid to enhance shelf life (abstract; claims). Therefore it would have been obvious to one of ordinary skill in the art to incorporate benzoic acid into the photopolymerization composition of AOSHIMA et al. in order to enhance the shelf life.

6. Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over AOSHIMA et al. (EP 1 235 107 A1) in view of ARIAS et al. (US 6,933,093B1) as applied to claims 1-5, 7-14, 16-21 above, and further in view of OSHIMA (EP 1 176 467 A1).

a. AOSHIMA et al. clearly teaches binder polymers having a carboxylic group in the side chain and having a molecular weight of 5,000 or more, specifically 10,000 to 300,000 ([0035]-[0036], [0039], [0041]) however AOSHIMA et al. do not specifically teach the binder polymer of present claims 6 and 15. It would have been obvious to use the polymeric binder of OSHIMA,



in the photopolymerizable composition of AOSHIMA et al. with reasonable expectation of improving the printing durability ([0011]-[0013], [0035]).

Response to Arguments

7. Applicant's arguments filed August 14, 2006 have been fully considered but they are not persuasive. Applicant argued there is no teaching or suggestion that would lead one of ordinary skill in the art to expect stability over time could be improved by adding carboxylic acid in the case of other resins other than a phenol resin of which AOSHIMA does not use. The Examiner disagrees. ARIAS et al. clearly teaches benzoic acid as a stabilizing acid and although the radiation sensitive composition of ARIAS comprises phenol resins, there is nothing in ARIAS to support Applicant's claim that the stabilizing acid inhibits only phenol binders from being absorbed into the substrate. Therefore the rejections of record are maintained.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

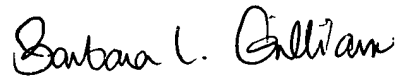
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara L. Gilliam whose telephone number is 571-272-1330. The examiner can normally be reached on Monday through Thursday, 8:00 AM - 5:30 PM.

a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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b. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Barbara L. Gilliam
Primary Examiner
Art Unit 1752

bg
October 29, 2006